TELOS

Air Force Enterprise Messaging Solution

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Advantages of an Enterprise Messaging Solution

- ➢ **Lower cost of ownership**
  - ➢ **Reduce DMS infrastructure; replace individual Fortessa and Outlook clients with web clients, and eliminate LCCs**

  - ➢ **Reduced manpower**
- ➢ **Easier to operate and use:**
  - ➢ **Web-based**
  - ➢ **Windows 2000 architecture**
  - ➢ **Reduce Fortezza management scope; consolidate CAW operations at a limited number of sites (recommend 1-2)**
- ➢ **Public Key Enabled**
- ➢ **Central message repository**
- ➢ **Efficient bandwidth utilization, DB pointers vice full messages**
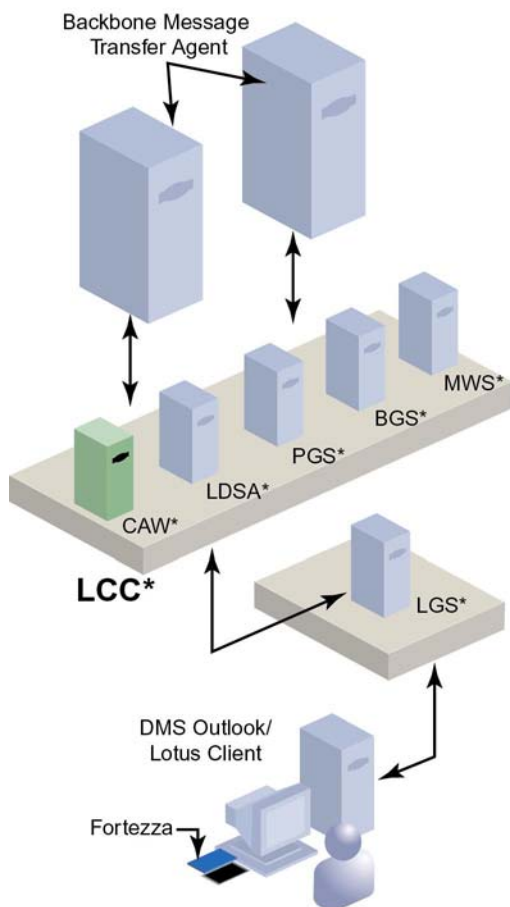
Advantages of an Enterprise Messaging Solution

➢ **More capable:**
- ➢ Supports multiple message protocols - DMS, AUTODIN and SMTP
- ➢ Multiple interfaces
- ➢ Internet-like retrospective Search
- ➢ Powerful easy-to-use profiling, message and binary attachments
- ➢ Searchable archive
- ➢ Audit for all messages
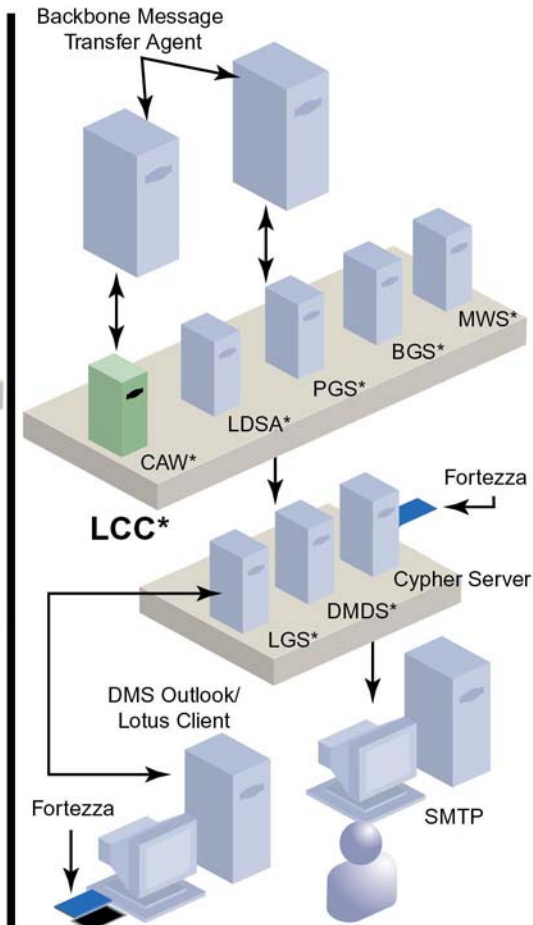- ➢ Supports remote operations
  - ➢ DMS core product

DMS Writer to Reader

Backbone Message Transfer Agent

MWS*
BGS*
PGS*
LDSA*
CAW*
LCC*
LGS*

DMS Outlook/Lotus Client

Fortezza

DMS with DMDS Profiling

Backbone Message Transfer Agent

MWS*
BGS*
PGS*
LDSA*
CAW*
LCC*
Fortezza
Cypher Server
LGS*
DMDS*

DMS Outlook/Lotus Client

Fortezza

SMTP

Telos Automated Message Handling System

Backbone Message Transfer Agent

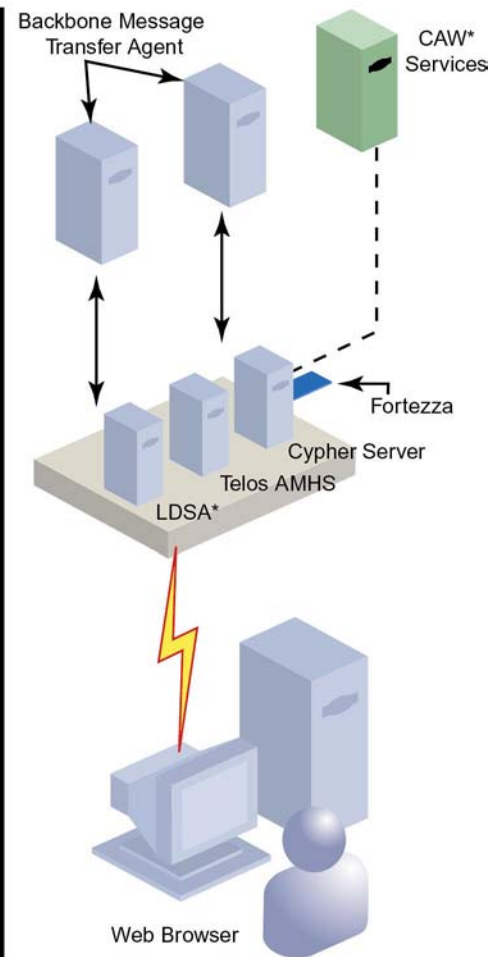CAW* Services

Fortezza
Cypher Server
Telos AMHS
LDSA*

Web Browser

Legend

* LCC - Local Control Center
* LDSA - Local Direct Service Agent
* PGS - Primary Groupware Server
* BGS - Backup Groupware Server
* MWS - Management Workstation
* CAW - Certificate Authority Workstation
* DMDS - Dissemination Message System
* LGS - Local Groupware Server

Information Assurance

Wireless Networking

Automated Message Handling

Notional AMC DMS Infrastructure

McChord AFB · LCC · Fairchild AFB · LCC · Robins AFB · LCC · Dover AFB · LCC

LCC · Backbone Message Transfer Agent · Backbone Message Transfer Agent · LCC

LCC · Travis AFB · LCC · LCC

McConnell AFB · LCC · McGuire AFB · Andrews AFB

LCC*
- MWS*
- BGS*
- PGS*
- LDSA*
- CAW*
- Fortezza
- DMS Outlook/ Lotus Client

LCC · Scott AFB

Backbone Message Transfer Agent

LCC · LCC

McDill AFB · LCC · Pope AFB

Charleston AFB

Legend
- * LCC — Local Control Center
- * LDSA — Local Direct Service Agent
- * PGS — Primary Groupware Server
- * BGS — Backup Groupware Server
- * MWS — Management Workstation
- * CAW — Certificate Authority Workstation
- * DMDS — Dissemination Message System
- * LGS — Local Groupware Server

Notional AMC AMHS With VPN Option

McConnell AFB

Fairchild AFB

Robins AFB

McChord AFB

Andrews AFB

Pope AFB

Dover AFB

McDill AFB

Scott AFB

Charleston AFB

*Cisco 3080 VPN

Cypher Server

Fortezza

*AMHS   *LDSA

Web Client
VPN Client

Legend

* LDSA - Local Direct Service Agent
* AMHS - Automated Message Handling System
* VPN   - Virtual Private Network
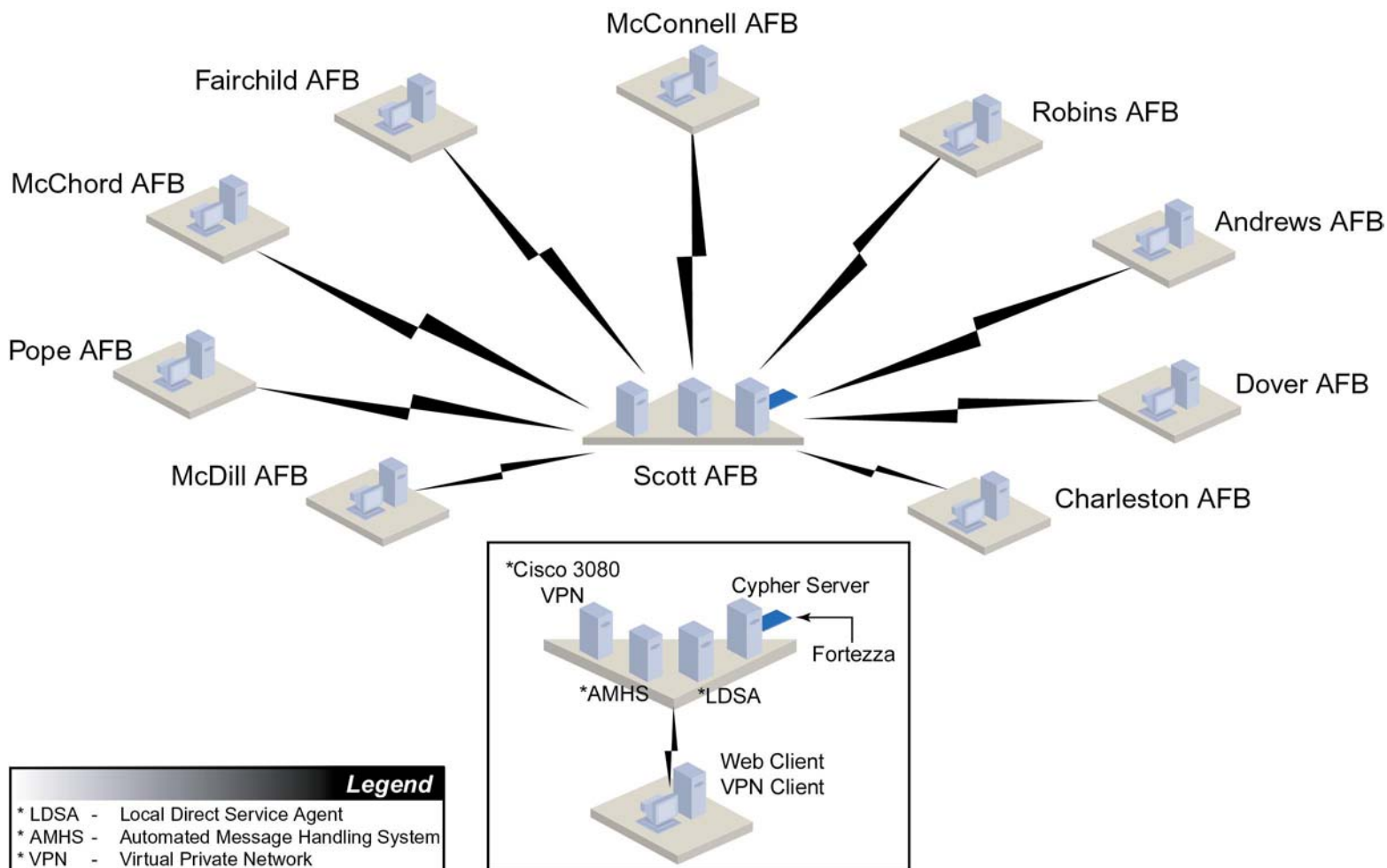
Cost Comparison 1000 user 32 Locations DMS vs AMHS

- **<u>DMS Cost 10,000 users</u>**
- Client
  - Fortezza cards $80 x10k= $800k
  - Outlook Client $118 x 10k = $1.18M
- LCC
  - PGS $1650 x 32 = $52.8k
  - BGS $1650 x 32 = $52.8k
  - LGS $1650 x 32 = $52.8k
  - LDSA $19k x 32 = $608k
  - MWS-R   ?   X 32 =   ?
  - CAW 4/5.0 $33k x 32 =$1.06M

- Annual O&M
  - 1.5 MY/site $90k x32 = $2.88M
  (based on McDill AFB est)
  - Software maint $89.6k

- Total for DMS Infrastructure **$3.8M**
- Annual recurring O&M   **$2.97M**

- **<u>AMHS cost 10,000 users</u>**
- Client
  - Web Browser Free
- AMHS
  - CP-XP $16k
  - 10k user AMHS $1.2M
  - 3 Cypher Server $9k
  - 24 Fortezza cards $2k
  - LDSA (use existing) $19k
  - CAW (optional) $33k

- Annual O&M
  - 5 MY AMHS $300k
  - 2 MY LDSA/CAW $180k
  - Software maint $120k

- Total 1000 user AMHS   **$1.28M**
- **Annual recurring O&M $600k**

ISSUES

- Enforce writer-to-reader using PKI.
- Scalability to meet Enterprise requirements
- Cultural Change

NCSS Architecture